REMARKS

Initially, Applicant would like to express his appreciation to the Examiner for allowing claims 14-20 in the present application.

In the above-referenced Official Action, the Examiner rejected claims 1, 4, 5, and 8 under 35 U.S.C. § 103(a) as being unpatentable over LIU (U.S. Patent No. 5,680,482) in view of STIFLE et al. (U.S. Patent No. 4,633,462), as discussed in the previous Office Action, dated December 31, 2003. The Examiner rejected claims 9-13 under 35 U.S.C. § 103(a) as being unpatentable over LIU in view of STIFLE et al. and BOYCE et al., as discussed in the previous Office Action. The Examiner rejected claims 2, 3, 6 and 7 under 35 U.S.C. § 103(a) as being unpatentable over LIU in view of STIFLE et al. and further in view of MALLADI (U.S. Patent No. 5,818,532), as discussed in the previous Office Action. Applicant respectfully traverses these rejections, at least for the reasons stated below.

The embodiments of the present invention recited in claims 1-13 are generally directed to reducing the processing power requirements of a video decoder that receives and decodes incoming video data. More specifically, a throttling amount is determined using a measure of (i) the processing power required to decode at least one bitstream of the video data and/or (ii) the video decoder's processing capabilities, without requiring encoded throttling control data associated with the video data. The computational processing requirements of the decoder is controlled based on the determined throttling amount. In the subject embodiments, this control includes reducing the amount of processing performed on the decoded video data prior to displaying a picture comprising

the decoded video data, and reducing a number of coefficients inverse quantized and inverse DCT transformed by selectively setting coefficients to alternate values.

The Examiner relied on LIU et al. as the primary reference in rejecting claims 1-13. However, the Examiner asserted only that LIU et al. teach (i) measuring processing power required to decode a bitstream of video data and (ii) measuring a decoder's processing capability. The Examiner admitted that LIU et al. do not disclose controlling computational processing requirements of the decoder based on a throttling amount. Further, LIU et al. do not measure required processing power and decoder processing capability for the purpose of determining a throttling amount. Rather, LIU et al. use these measures merely to allocate buffers. *See* steps 372, 374; col. 13, lines 55-59.

The Examiner asserted that STIFLE et al. teaches determining a throttling amount without requiring encoded throttling control data associated with the video data. However, the "throttling" discussed by STIFLE et al. relates only to retransmitting a reverse channel signal from a remote subscriber in a CATV environment whenever the originally transmitted signal collides with a reverse channel signal from another remote subscriber. The retransmitted signal is retransmitted repeatedly, if necessary, after respectively determined sequential delays. The length of these delays can be "throttled" to attempt to avoid future collisions involving the retransmitted signals, thereby stabilizing the system. *See* col. 4, lines 53-57. In other words, STIFLE et al. teach determining a throttling amount for adjusting a delay time for retransmitting data, not for controlling computation processing requirements of the decoder, as in the present invention.

The Examiner dismissed Applicant's previous arguments, asserting that he relied on STIFLE et al. only to teach determining a throttling amount without requiring encoded throttling control data associated with the video data. He also asserted that he relied on LIU et al. only to teach measuring computational processing power and decoder processing capabilities. The Examiner, in making these assertions and in dismissing Applicant's arguments, appears to have missed the point that neither LIU et al. nor STIFLE et al., alone or in combination, teach controlling computational processing requirements of the video decoder based on a throttling amount (or based on the processing measurements, for that matter). In other words, the Examiner still has not identified a reference that teaches controlling and/or reducing processing requirements.

In short, the Examiner has identified two discrete, completely unrelated references, one to teach "measuring" and one to teach "throttling" in the abstract, but otherwise bearing no relation to reducing or controlling processing power requirements of a video decoder, which is central to the claimed invention. The Examiner simply has not identified any reference to teach controlling processing requirements based on the measuring and/or the throttling. Measuring required processing power and decoder processing capability to allocate buffers, and throttling sequential retransmission delays to prevent signal collisions, simply do not combine to teach reducing processing power requirements based, in part, on a throttling amount that is determined through the measuring process.

Further, the Examiner has never articulated any motivation, nor does any motivation exist, to combine the processing power/capability measuring for buffer allocation of LIU et al. and the time-delay throttling for collision avoidance of STIFLE et

al. Accordingly, Applicant respectfully requests withdrawal of all rejections based on the combination of LIU et al. and STIFLE et al.

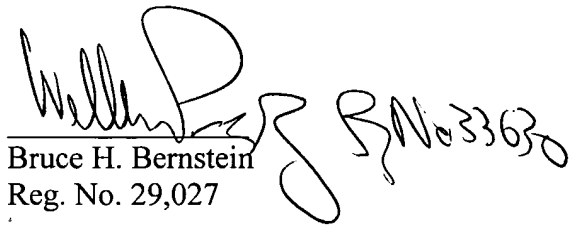
For at least the reasons stated above, Applicant respectfully submits that independent claims 1, 5, 9 and 12 have been shown to be allowable. With regard to claims 2-4, 6-8, 10-11 and 13, Applicant asserts that they are allowable at least because they depend from allowable independent claims 1, 5, 9 and 12, respectively.

Furthermore, with respect to claims 9 and 13, the Examiner relied on BOYCE et al. only to teach setting coefficients to different values. Therefore, BOYCE et al. admittedly do not overcome the shortcomings of LIU et al. and STIFLE et al. noted above. With respect to claims 2, 3, 6 and 7, the Examiner relied on MALLADI et al. only to teach limiting a function of at least one post filter or one format conversion filter. Therefore, MALLADI et al. admittedly do not overcome the shortcomings of LIU et al. and STIFLE et al. noted above. Accordingly, withdrawal of the rejections based on any combination including the LIU et al., STIFLE et al., BOYCE et al., and/or MALLADI et al. references is respectfully requested.

In view of the herein contained amendments and remarks, Applicant respectfully requests reconsideration and withdrawal of previously asserted rejections set forth in the Official Action, together with an indication of the allowability of all pending claims, in due course. Such action is respectfully requested and is believed to be appropriate and proper.

Should the Examiner have any questions concerning this Amendment or the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,
William Brent WILSON



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